

Docket Number: 081468-0306525  
Client Reference: P-1586.010-US

*Ifc*  
PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN THE APPLICATION OF  
ZOF et al.

Application No.: 10/705,816

Group Art Unit: 2882

Filed: November 12, 2003

Examiner: Unassigned

Confirmation No.: 5408

For: LITHOGRAPHIC APPARATUS AND DEVICE MANUFACTURING METHOD

January 7, 2005

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. 1.56, the attention of the Patent and Trademark Office is hereby directed to the following U.S. patent application(s):

Examiner's Initials	First Inventor	Application No.	Filing Date	Enclosed
	SUWA et al. (Reissue Application of U.S. Patent No. 6,191,429 B1)	10/367,910	02/19/2003	<input checked="" type="checkbox"/> Specification <input checked="" type="checkbox"/> Drawings <input type="checkbox"/> Other: stamped receipt card
	HOOGENDAM et al. (081468-0308674)	10/831,370	04/26/2004	<input checked="" type="checkbox"/> Specification <input checked="" type="checkbox"/> Drawings <input checked="" type="checkbox"/> Other: stamped receipt card

\*The Examiner's initials adjacent a citation indicates he/she has considered the cited application relative to the subject application.

It is respectfully requested that these applications and the art cited therein during examination be expressly considered during the prosecution of this application and be made of record in this application. The identification of the above U.S. patent applications is not to be construed as a waiver of secrecy as to those applications now or upon issuance of the present application as a patent.

**PLEASE DO NOT PRINT** the above information on the patent which results from this application.

Consideration of each listed application is earnestly solicited since unpublished patent applications are contemplated as IDS material; see the exception in Rule 98(a)(2)(iii) and note the penultimate sentence of MPEP 609.

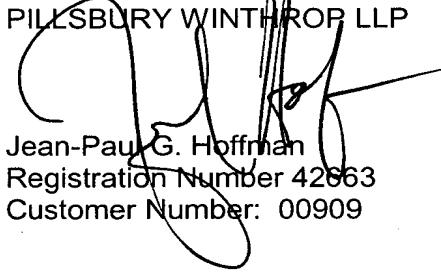
Further, in keeping with MPEP 609, subsec. C(2), 2nd para., line 10 to end of the paragraph (especially note lines 18-25) **PLEASE RETURN A COPY OF THIS LETTER** with the Examiner's initials adjacent each above listing so that applicant will know that each listed application has been considered as required by PTO policy.

Secondly, please consider each document which is listed on the attached Form PTO-1449 and return a copy of that form with the Examiner's initials adjacent each citation, a copy of each document enclosed except for any U.S. patents and published patent applications. It is respectfully requested that these documents listed on the Form PTO-1449 be expressly considered during the prosecution of this application, and that the documents be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is being filed before the mailing date of the first Office Action on the merits in the present application. No certification or fee is required.

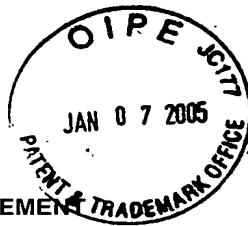
Respectfully Submitted,

PILLSBURY WINTHROP LLP

  
Jean-Paul G. Hoffman  
Registration Number 42963  
Customer Number: 00909

P.O. Box 10500  
McLean, VA 22102  
Telephone: (703) 905-2000  
Facsimile: (703) 905-2500

FORM PT-1449 (modified)  
 To: U.S. Department of Commerce  
 (PW FORM PAT-1449)  
 Patent and Trademark Office



INFORMATION DISCLOSURE STATEMENT  
 BY APPLICANT

Date: January 7, 2005

Page **1** of **2**

Atty. Dkt. No.	M#	Client Ref.
	306525	P-1586.010-US
Applicant: LOF et al.		
Appln. No. 10/705,816		
Filing Date: November 12, 2003		
Examiner: Unknown	Group Art Unit: 2882	

U.S. PATENT DOCUMENTS

Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
AR	4,390,273	06/1983	LOEBACH et al.	355	125	
BR	6,603,130	08/2003	BISSCHOPS et al.	250	492.1	
CR	6,633,365	10/2003	SUENAGA	355	53	
DR	2002/0163629	11/2002	SWITKES et al.	355	53	
ER	2003/0123040	07/2003	ALMOGY	355	69	
FR	2003/0174408	09/2003	ROSTALSKI et al.	359	642	
GR	2004/0075895 A1	04/2004	LIN	359	380	
HR	2004/0109237 A1	06/2004	EPPEL et al.			
IR	6,236,634 B1	05/2001	LEE et al.	369	112	
JR	2002/0020821 A1	02/2002	VAN SANTEN et al.	250	492	
KR	2004/0119954	06/2004	KAWASHIMA et al.	355	30	
LR	2004/0125351	07/2004	KRAUTSCHIK et al.	355	53	

FOREIGN PATENT DOCUMENTS

	Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract		Translation Readily Available	
					Enclosed	No	Enclosed	No
MR	JP 04-305915	10/1992	JAPAN	OZEKI et al.		X		
NR	JP 04-305917	10/1992	JAPAN	OZEKI et al.		X		
OR	JP 06-124873	05/1994	JAPAN	TAKAHASHI		X		X
PR	JP 07-220990	08/1995	JAPAN	FUKUDA et al.				
QR	JP 10-228661	08/1998	JAPAN	KUROKAWA		X		
RR	JP 10-255319	09/1998	JAPAN	SUENAGA et al.		X		
SR	JP 10-303114	11/1998	JAPAN	SUWA		X		X
TR	JP 10-340846	12/1998	JAPAN	KUDO		X		X
UR	JP 2001-091849	04/2001	JAPAN	AIZAKI et al.		X		
VR	JP 07-132262	05/1995	JAPAN	HIRAKAWA et al.		X		

OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

WR	B.J. LIN, "Drivers, Prospects and Challenges for Immersion Lithography", TSMC, Inc., September 2002			
XR	B.J. LIN, "Proximity Printing Through Liquid", IBM Technical Disclosure Bulletin, Vol.20, No. 11B, April 1978, p. 4997			
YR	S. OWA et al., "Update on 193nm immersion exposure tool", Litho Forum, International SEMATECH, Los Angeles, January 27-29, 2004, Slide Nos. 1-51			
ZR	H. HATA, "The Development of Immersion Exposure Tools", Litho Forum, International SEMATECH, Los Angeles, January 27-29, 2004, Slide Nos. 1-22			
AAR	T. MATSUYAMA et al., "Nikon Projection Lens Update", SPIE Microlithography 2004, 5377-65, March, 2004			
BBR				

Examiner \_\_\_\_\_ Date Considered: \_\_\_\_\_

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTÓ-1449 (modified)  
 To: U.S. Department of Commerce  
 (PW FORM PAT-1449)  
 Patent and Trademark Office

Atty.  
 Dkt. No.

M#

Client Ref.

306525

P-1586.010-US

**INFORMATION DISCLOSURE STATEMENT  
 BY APPLICANT**

Date: January 7, 2005

Page **2** of **2**

Applicant: LOF et al.

Appln. No. 10/705,816

Filing Date: November 12, 2003

Examiner: Unknown

Group Art Unit: 2882

**U.S. PATENT DOCUMENTS**

Examiner's Initials*		Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
	AR						
	BR						

**FOREIGN PATENT DOCUMENTS**

		Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract		Translation Readily Available	
						Enclosed	No	Enclosed	No
	CR	JP 58-202448	11/1983	JAPAN	KAWAMURA et al.		X		
	DR	WO 2004/019128	03/2004	PCT	OMURA et al.		X		X
	ER	WO 03/077037	09/2003	PCT	ROSTALSKI et al.		X		X
	FR	WO 03/077036	09/2003	PCT	SCHUSTER		X		
	GR	DD 206 607	02/1984	GERMANY	WESTPHAL et al.				X
	HR	DD 221 563	04/1985	GERMANY	PFORR et al.				X
	IR	JP 11-176727	07/1999	JAPAN	SHIRAISHI			X	
	JR	JP 2000-058436	02/2000	JAPAN	FUJISHIMA et al.			X	
	KR	WO 2004/053950 A1	06/2004	PCT	OWA			X	
	LR	WO 2004/053951 A1	06/2004	PCT	MAGOME et al.			X	
	MR	WO 2004/053952 A1	06/2004	PCT	MAGOME et al.			X	
	NR	WO 2004/053953 A1	06/2004	PCT	NEI et al.			X	
	OR	WO 2004/053954 A1	06/2004	PCT	NEI et al.			X	
	PR	WO 2004/053955 A1	06/2004	PCT	HIRUKAWA et al.			X	
	QR	WO 2004/053956 A1	06/2004	PCT	NAGASAKA et al.			X	
	RR	WO 2004/053957 A1	06/2004	PCT	HIDAKA et al.			X	
	SR	WO 2004/053958 A1	06/2004	PCT	MIZUTANI et al.			X	
	TR	WO 2004/053959 A1	06/2004	PCT	SHIRAI			X	
	UR	WO 2004/053596 A2	06/2004	PCT	GRAUPNER			X	
	VR	WO 2004/055803 A1	07/2004	PCT	VAN SANTEN			X	
	WR	WO 2004/057589 A1	07/2004	PCT	NEIJZEN et al.			X	
	XR	WO 2004/057590 A1	07/2004	PCT	VAN SANTEN et al.			X	
	YR	JP 2004-193252	07/2004	JAPAN	Not Available			X	

**OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)**

ZR	"Depth-of-Focus Enhancement Using High Refractive Index Layer on the Imaging Layer", IBM Technical Disclosure Bulletin, Vol. 27, No. 11, April 1985, p. 6521		
AAR	A. SUZUKI, "Lithography Advances on Multiple Fronts", EEdesign, EE Times, January 5, 2004		
BBR	B. LIN, "The $k_3$ coefficient in nonparaxial $\lambda/NA$ scaling equations for resolution, depth of focus, and immersion lithography, J. Microlith., Microfab., Microsyst. 1(1):7-12 (2002)		
CCR			

Examiner

Date Considered:

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.